



Missouri Department of Natural Resources

## Total Maximum Daily Load Information Sheet

### Wyaconda Lake

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#### Waterbody Segment at a Glance:

**County:** Clark  
**Nearby Cities:** Wyaconda  
**Area of impairment:** 8 acres  
**Pollutant:** Atrazine  
**Source:** Corn and sorghum production



**Note:** Proposed for deletion on 2002 303(d) list.

**TMDL Priority Ranking:** High

State map showing location of watershed

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#### Description of the Problem

##### Beneficial Uses of Wyaconda Lake

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life and Human Health associated with Fish Consumption
- Boating and Canoeing
- Drinking Water Supply

##### Use that is Impaired

- Drinking Water Supply

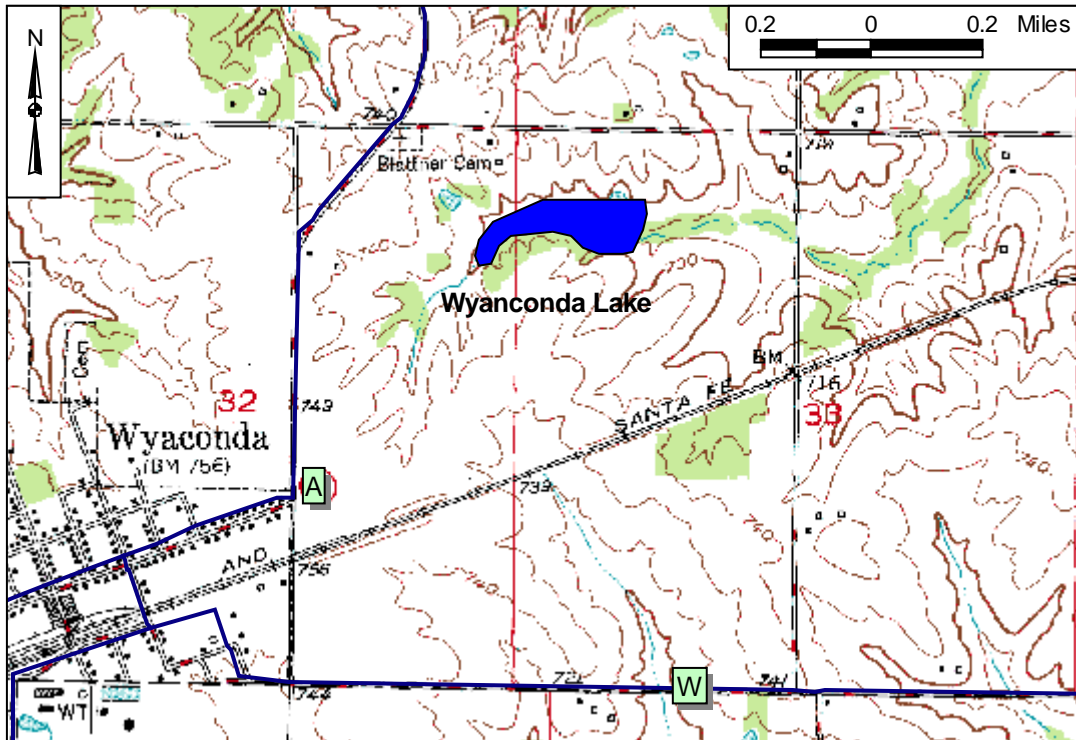
##### Standards that apply

The impairment of this lake is based on exceedence of the specific criterion of 3 micrograms per liter ( $\mu\text{g/L}$  or parts per billion) atrazine, as an average of the period of record, contained in Missouri's Water Quality Standards. 10 CSR 20-7.031 Table A.

Wyaconda Lake is a drinking water source for the city of Wyaconda. Measurements of atrazine in the lake have been taken by the Missouri Department of Natural Resources, Monsanto Inc., and Novartis Inc. Atrazine is an herbicide widely used for control of broadleaf weeds. It is the most heavily used herbicide for corn and sorghum in Missouri. Since 1993, however, its uses have been greatly restricted. It has been found that atrazine concentrations commonly exceed the state limit of  $3 \mu\text{g/L}$ , in recent years the levels of atrazine have decreased considerably and the long term average concentration is now  $2.08 \mu\text{g/L}$  and this reservoir is proposed for deletion from the 303(d) list. Continued monitoring of the lake will be necessary to ensure the safety of the drinking water

supply. The following information contains a map of the lake area and tables that summarize the existing data.

### Map of Wyaconda Lake, Clark County, Missouri



### Monthly Atrazine Levels in Wyaconda Lake, 1996-1999 ( $\mu\text{g/L}$ )

Month (years)	Average	Range
January (1998-1999)	2.5	1.2-3.8
February (1998-1999)	2.25	1-3.5
March (1998-1999)	1.4	0.8-2
April (1998-1999)	1.15	0.7-1.6
May (1998-1999)	1.05	0.9-1.2
June (1997-1999)	4.03	1-7
July (1996-1999)	4.15	1.4-8.5
August (1996-1999)	4.3	0.9-10
September (1996-1999)	4.88	1.2-9.5
October (1996-1999)	4.15	0.8-8.5

November (1997-1999)	3.03	0.8-6
December (1998-1999)	1.15	0.9-1.4

Source: Novartis Inc.

**Yearly Atrazine Levels in Wyaconda Lake, 1996-1999**  
(µg/L)

<b>Year (months)</b>	<b>Average</b>	<b>Range</b>
1996 (7-10)	3.85	2.7-5
1997 (6-11)	8.25	6-10
1998 (1-12)	2.96	1.4-4.6
1999 (1-12)	0.97	0.5-1.4

Source: Novartis, Inc.

**Atrazine Levels in Wyaconda Lake, 1997**  
(µg/L)

January	2.18
March	1.05
April	0.62
May	0.59
June	6.3

Source: Monsanto Inc.

**Atrazine Levels in Wyaconda Lake, 1999-2000**  
(µg/L)

August, 1999	0.39
December, 1999	0
March, 2000	0
June, 2000	0
September, 2000	0

Source: Missouri Dept of Natural Resources

**For more information call or write:**

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